

### **Claim Listing**

1. (Previously amended) A method for sending a message stored in the memory of a first data processing system into the memory of a second data processing system, said method comprising the steps of:

transmitting said message from said first data processing system to a temporary memory in an adapter which is connected to said second data processing system;

transferring, from said adapter to said second data processing system, an indication that said temporary memory in said adapter contains the message received from said first data processing system;

transferring, from said second data processing system to said adapter, real address information indicating target memory locations for said message, said memory locations being application level address space locations;

transferring said message, from said temporary memory in said adapter, directly into said target memory locations in the memory of said second data processing system, said transfer occurring via direct memory access;

transferring, from said adapter to said second data processing system, an indication that said target locations now contain the message received from said first data processing system; and

transmitting an acknowledgment of receipt of said message from said second data processing system to said first data processing system.

2. (Original) The method of claim 1 further including the step of advancing indicators in said first data processing system in preparation of transmitting another message, whereby a number of messages may be sent in rapid sequence.

3. (Previously amended) A method for sending a message from a first data processing system to the memory of a second data processing system, said method comprising the steps of:

establishing an association between said message and real address information indicating desired memory locations for said memory, said memory locations being application level address space locations;

transmitting said message from said first data processing system to a temporary memory in an adapter which is connected to said second data processing system;

transferring, from said adapter to said second data processing system, an indication that said temporary memory in said adapter contains the message received from said first data processing system;

transferring, from said second data processing system to said adapter, said real address information;

transferring said message, from said temporary memory in said adapter, directly into said desired memory locations in the memory of said second data processing system, said transfer occurring via direct memory access;

transferring, from said adapter to said second data processing system, an indication that said desired locations contain the message received from said first data processing system; and

transmitting an acknowledgment of receipt of said message from said second data processing system to said first data processing system.